

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A preference execution system comprising:
  - a data store component for storing schematized data and end-user specified preferences;
  - a compiler to compile information agent applications including end-user specified preferences and store the compiled information agent applications in the data store;
  - an execution engine to retrieve preferences stored in the data store upon the occurrence of one or more events and to utilize the preferences and at least one stored procedure to query tables within the data store and produce a results table, wherein the results table stores preferences whose conditions have been satisfied such that specified actions are triggered based on the stored preferences; and
  - a context analyzer that stores and analyzes information regarding variables and parameters of a user that influence notification decision-making, the parameters comprise contextual information, such as the user's typical locations and attentional focus, activities per time of day and day of week, devices users tend to have access to in different locations, and a user's preference as to being disturbed by notifications of different types in different settings, which is assessed based on a cost of disruption associated with being notified, and the parameters also comprise functions of observations made autonomously *via* one or more sensors and dynamically inferred parameters, the parameters are stored as a user profile that can be edited by the user or users can specify in real-time their state.
2. (Original) The system of claim 1, further comprising an action component for taking one or more actions specified by a conditionally valid preference.

3. (Original) The system of claim 2, the action component comprising a notification component that transforms and formats notification data generated by the execution engine based on a user preference for one or more user communication devices.
4. (Original) The system of claim 1, wherein the communication devices include a mobile phone, a pager, a PDA, and a computer.
5. (Original) The system of claim 1, further comprising an event component to extract event data from an event source and store the data in the data store.
6. (Original) The system of claim 5, wherein the event source is a subscription service.
7. (Canceled)
8. (Previously Presented) The system of claim 1, wherein the context analyzer produces context data indicative of an end-users context at a given time and stores the context data in the data store.
9. (Original) The system of claim 1, further comprising one or more APIs to interact with applications.
10. (Original) The system of claim 1, wherein the compiler can compile and the execution engine can execute both heavyweight applications and lightweight preference applications.
11. (Original) The system of claim 1, the execution engine evaluates preferences by executing queries on data stored in the data store.
12. (Original) The system of claim 1, wherein end-user preferences are based on a developer specified schema.

13. (Original) The system of claim 12, wherein information regarding end-user preferences and the developer schema are stored in one or more tables in the data store.

14. (Previously Presented) A method for application installation comprising:  
establishing a set of base tables in a data store;  
storing program actions, conditions, events and procedures as data in the data store;  
updating the base tables with application data associated with an application being installed by retrieving program text from the data store and executing the program text,  
wherein the application employs user defined preferences *via* a context analyzer that stores and analyzes information regarding variables and parameters of a user that influence notification decision-making.

15. (Canceled)

16. (Original) The method of claim 14, wherein application data includes application procedures that are stored as data.

17. (Original) A computer readable medium having instructions stored thereon for carrying out the method of claim 14.

18. (Currently Amended) A method for employing preferences comprising:  
specifying user preferences regarding an information agent application based on a developer schema;  
storing the preferences and schematized data in one or more tables in a data store;  
querying the tables in the data store upon occurrence of an event and retrieving preferences stored in the data store;  
producing a results table, wherein the results table stores preferences whose conditions have been satisfied such that specified actions are triggered;  
executing actions based on the results table;  
utilizing a context analyzer that stores and analyzes information regarding variables and parameters of a user that influence notification decision-making, the parameters comprise

contextual information, such as the user's typical locations and attentional focus, activities per time of day and day of week, devices users tend to have access to in different locations, and a user's preference as to being disturbed by notifications of different types in different settings, which is assessed based on a cost of disruption associated with being notified, and the parameters also comprise functions of observations made autonomously *via* one or more sensors and dynamically inferred parameters; and

storing the parameters as a user profile that can be edited by the user or allowing users to specify in real-time their state;

wherein user preferences are specified by utilizing a one-at-a-time declarative programming model, wherein user preferences are specified using one or more On-event-If-Then statements and Boolean operators to specify conditions and actions, wherein querying the tables comprises executing query language statements, and the developer schema is an XML schema.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Previously Presented) A computer readable medium having instructions stored thereon computer executable instructions for executing the method of claim 18.